

What is claimed is:

1. A cooling jacket to be mounted on an outer surface of an electric motor for cooling the electric motor, comprising:

a cooling pipe for flowing coolant;

a plate member having one surface supporting said cooling pipe;

fastening means for fastening said plate member on the electric motor such that the other surface of the plate member abuts on the outer surface of the electric motor.

2. A cooling jacket according to claim 1, wherein said plate member is divided into a plurality of plate segments, and said fastening means comprises connecting members for connecting adjacent ones of the plate segments and having adjustors for adjusting gaps between the adjacent ones of the plate segments.

3. A cooling jacket according to claim 2, wherein each of said adjustors comprises an elongated through hole formed on the connecting member and a screw.

4. A cooling jacket according to claim 2, wherein the other surfaces of the plate segments to be abutted on the outer surface of the electric motor are formed to conform with a shape of the electric motor to be in close contact with the outer surfaces of the electric motor.

5. A cooling jacket according to claim 1, further comprising a lid member for covering said cooling pipe in confronting relation to the plate member.

6. A cooling jacket according to claim 5, wherein resin having heat

conductivity is filled between said plate member and said lid member.

7. A cooling jacket according to claim 1, wherein said plate member has grooves for supporting said cooling pipe.

8. A motor unit comprising:

an electric motor;

at least one cooling jacket mounted on an outer surface of said electric motor, each said cooling jacket including a cooling pipe for flowing coolant, a plate member having one surface supporting said cooling pipe, and fastening means for fastening said plate member on the electric motor such that the other surface of the plate member abuts on the outer surface of the electric motor.

9. A motor unit according to claim 8, wherein said plate member is divided into a plurality of plate segments, and said fastening means comprises connecting members for connecting adjacent ones of the plate segments and having adjustors for adjusting gaps between the adjacent ones of the plate segments.

10. A motor unit according to claim 9, wherein each of said adjustors comprises an elongated though hole formed on the connecting member and a screw.

11. A motor unit according to claim 9, wherein the other surfaces of the plate segments to be abutted on the outer surface of the electric motor are formed to conform with a shape of the electric motor to be in close contact with the outer surfaces of the electric motor.

12. A motor unit according to claim 8, further comprising a lid member for covering said cooling pipe in confronting relation to the plate member.

13. A motor unit according to claim 12, wherein resin having heat conductivity is filled between said plate member and said lid member.

14. A motor unit according to claim 8, wherein said plate member has grooves for supporting said cooling pipe.